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14. ABSTRACT To attain PSI objectives, planners must resolve the operational and legal issues in inherent to the maritime interception of WMD. The factors of space, time and force create strengths and weaknesses for interception operations. Intelligence helps commanders manage these operational factors and create legal justification for WMD interdiction. Legal provisions relevant to WMD interdiction have both utility and limitations. In this paper, analysis and supporting charts contour how operational factors and customary international law and treaties create legal options for interdiction at sea. Objectives, centers of gravity, critical vulnerabilities and decisive points are identified. Recommendations are offered to enhance operations, based upon what is legally feasible. Focus on WMD source countries and drug trafficking is suggested. The advantages and challenges of using NATO architecture and combined exercises and deployments are briefly discussed. Interagency and international resources can improve intelligence sharing among PSI participants. The thesis clarifies that existing law is suitable for counter-proliferation and suggests how commanders can enhance the law's capacity to achieve PSI objectives.

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Operational Art for the Proliferation Security Initiative

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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract

On May 31, 2003, President Bush launched the Proliferation Security Initiative (PSI) to achieve counter-proliferation goals articulated in three published national strategies. Led by the United States, PSI is a multi-national coalition of sixteen nations, including thirteen NATO members. On September 4, 2003, participants issued a "Statement of Interdiction Principles" and have made clear that diplomatic, information and military instruments of power will be used. Combatant commanders have been assigned specific responsibilities for counter-proliferation.

Maritime interdiction is the component of PSI that will be analyzed in this paper. To attain PSI objectives, planners must resolve the operational and legal issues in inherent to the maritime interception of WMD. The factors of space, time and force create strengths and weaknesses for interception operations. Intelligence helps commanders manage these operational factors and create legal justification for WMD interdiction. Legal provisions relevant to WMD interdiction have both utility and limitations. In this paper, analysis and supporting charts contour how operational factors and customary international law and treaties create legal options for interdiction at sea. Objectives, centers of gravity, critical vulnerabilities and decisive points are identified. Recommendations are offered to enhance operations, based upon what is legally feasible. Focus on WMD source countries and drug trafficking is suggested. The advantages and challenges of using NATO architecture and combined exercises and deployments are briefly discussed. Interagency and international resources can improve intelligence sharing among PSI participants. The thesis clarifies that existing law is suitable for counter-proliferation and suggests how commanders can enhance the law's capacity to achieve PSI objectives.

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I. Introduction: The Influence of the Law on Maritime Interdiction Operations.

"Chemical, biological and nuclear weapons, along with ballistic missile technology" are the means by which "small groups could attain a catastrophic power to strike great nations."[1] Preventing terrorists from obtaining weapons of mass destruction (WMD) has inspired a dramatic shift in U.S. strategy, from deterrence to preemption: "We must take the battle to the enemy, disrupt his plans and confront the worst threats before they emerge."[2] The So San incident of December 2002 revealed legal hurdles in the path of a proactive strategy.

U.S. intelligence had evidence that a North Korean ship, the So San, was carrying Scud missiles to Yemen.[3] Spanish naval units pursued the vessel in international waters of the Indian Ocean. Surveillance revealed the facts which provided legal justification for boarding. No vessel named So San was registered under the North Korean flag. The crew kept raising and lowering its flag and "So San" was freshly painted on the stern, the customary location for a ship's name. Under international law, all of these facts permitted Spanish warships to invoke a peacetime right to approach and visit "stateless" vessels. The master of the vessel declined to give consent for boarding and ignored warning shots, requiring a Spanish special forces team to rappel aboard by helicopter to stop and search the vessel. The master claimed his cargo was cement, but the Spanish boarding team discovered fifteen hidden Scud missiles.[4] Dialogue between the United States and Yemen followed, fueling speculation that political considerations would impact the interdiction. Yemen was a prospective partner in the War on Terror. Escalation in tensions with a nuclear-capable North Korea was something to be avoided.

Legal debate on the incident begins with the premise that proper authority

for two actions must be present for effective interdiction. First, there must be authority to visit and search a particular vessel. This was satisfied by So San's status as "stateless." Second, there must be authority to seize, detain or divert cargo found aboard. This prong was not satisfied. There was no legal authority to confiscate the missiles and So San was allowed to proceed.[5]

The situation is frustrating in operational terms. A coalition mastered the factors of time, space and force. Prompt intelligence correctly identified a Scud courier. It was intercepted before it could deliver its cargo and apprehended with minimal and sufficient force. Yet there was no gain; the Scuds were permitted to arrive at their destination, due to the lack of legal power to seize them. Or perhaps the lack of political will to argue there was, or should be, legal justification for seizure. Despite the operational success, a mixture of international law and politics could not be synchronized, and so the interdiction failed.

On May 31, 2003, President Bush launched the Proliferation Security Initiative (PSI) to achieve counter-proliferation goals articulated in three published national strategies.[6] Led by the United States, PSI is a multi-national coalition of sixteen nations.[7] Participants have issued a "Statement of Interdiction Principles" and have made clear that diplomatic, information and military instruments of power will be used.[8] Their strategic objective is to "impede and stop shipments of WMD . . . flowing to and from states and non-state actors of proliferation concern . . ."[9] Combatant commanders have been assigned specific responsibilities for counter-proliferation.[10]

Maritime interdiction is the component of PSI that will be analyzed in this paper. Combatant commanders will have to translate the diplomatic language of PSI into

maritime interception operations (MIO).[11] Accordingly, this paper will use the language of operational art, conceding that this is sometimes by analogy. The use of military terminology does not change the fact that the Department of State is the lead agency for the United States diplomatic and political campaign to have PSI adopted by various nations.

To attain PSI objectives, planners must resolve the operational and legal issues inherent to MIO. The operational factors of space, time and force create strengths and weaknesses for WMD interdiction operations. Intelligence helps commanders manage the space, time and force factors. Legal provisions relevant to WMD interdiction have both utility and limitations. Analysis and supporting charts will contour how customary international law and treaties create legal options for interdiction at sea. Objective, centers of gravity, critical vulnerabilities and decisive points are identified. Specific recommendations are offered to enhance operations, based upon what is legally feasible. Focus on WMD source countries and drug trafficking is suggested. The advantages and challenges of using NATO architecture and combined exercises and deployments are briefly discussed. Interagency and international resources can improve intelligence sharing among PSI participants. This thesis clarifies that existing law is suitable for counter-proliferation and suggests how commanders can enhance the law's capacity to achieve PSI objectives.

II. Analysis: The Factors of Space, Time and Force for Counter-Proliferation.

A. Factor Space. "More than fifty countries have signaled that they support the PSI

and are ready to participate in interdiction efforts."[12] PSI participants have the sovereign power to inspect any vessel or aircraft present in their territories, territorial seas and airspace, and to a lesser extent, in their contiguous zones. They can authorize search of their flag vessels where ever found. While on the ground in a nation's territory, or in port for ships, non-military aircraft and vessels of any nationality can be searched by the host nation. Under international law, a nation's sovereignty extends twelve nautical miles seaward and this area is referred to as "territorial sea." In a territorial sea, the host nation enjoys law enforcement rights identical to those exercised on its national territory and therefore can search 100% of vessels found. The airspace above the territorial sea is also considered national airspace. The coastal nation has the right to refuse entry of foreign aircraft into its national airspace.

The next twelve miles of ocean, if declared by the coastal nation, is known as the contiguous zone. Coastal nations are permitted to exercise customs, fiscal, immigration and sanitary laws in waters of its contiguous zone. WMD are by definition dangerous materials, and therefore transporting them to a country must at least be consistent with that nation's customs laws. Thus, every nation has the authority to prevent illegal WMD "imports" by enforcing customs laws within twenty-four nautical miles of its territory.

The reality of making ports, national airspace, territorial seas and contiguous zones, less porous to WMD transport is an enormous operational challenge. Work continues on achieving "Maritime Domain Awareness" (MDA).[13] MDA includes both "a national vessel-movement reporting system" for the homeland and foreign port inspection.[14] American coastline sprawls along 98,000 miles and includes "3.5 million square miles of ocean area" over which the United States has jurisdiction and 185

deepwater ports.[15] Focus on the world's largest ports begins to compress the space problem. Sixteen "super ports" handle 99% of the world's trade volume and 90% of this volume passes through nine choke points.[16]

International trade is accomplished by at least 100,000 registered merchant vessels weighing 100 gross tons or more, that are flagged by different countries.[17] In international waters, anywhere seaward of a contiguous zone, warships can approach and visit merchant vessels flying their country's flag. Therefore, PSI participants also bring the sovereign power to authorize inspection of their flagged vessels in international waters. Significant here is the fact that current PSI participants only flag a fraction of the world's merchant vessels. A recent bilateral agreement between the US and Liberia, flag nation for the second-largest merchant fleet, will permit boardings by the US in international waters to search for WMD.[18] Only six PSI nations are among the world's largest fifteen fleets, accounting for only 12% of all merchant vessels. The bilateral agreement with Liberia raises the percentage of vessels accessible to consent boardings by PSI nations to over 18%.[19]

Vessels in international waters are generally immune from the jurisdiction of other nations. Stopping a vessel at sea means interfering with its fundamental right of freedom of navigation. Warships have the unique power to abridge free navigation by legally approaching and visiting vessels. During an "approach and visit," the vessel's master may consent to a search. However, even temporary interference costs merchants time, inconvenience and money. The extent of a warship's power to "approach and visit," and search without the master's consent, depends on whether the situation justifies the intrusion.

In peacetime, the balance is in favor of free navigation. As codified by the 1982 United Nations Law of the Sea Convention (UNCLOS), warships may only impede upon reasonable grounds to suspect the vessel is engaged in one of six categories of illegal activity: (i) piracy, (ii) slave trade, (iii) unauthorized broadcasting, (iv) without nationality, (v) deception regarding its nationality and the vessel is actually the same nationality as the warship, (vi) illegal narcotics trafficking.[20] Chart 1 summarizes the impact PSI participants have on space, bringing authority in their national waters and over their vessels in international waters, in contrast with the limited power of warships on the high seas.

CHART 1: SUMMARY OF LEGAL AUTHORITY FOR APPROACH AND VISIT

PSI Territorial Seas	PSI Contiguous Zone	High Seas
All vessels	All vessels for enforcement of customs, fiscal, immigration and sanitary laws.	PSI flagged Vessels only **or** Consent **or** Reasonable Suspicion of an illegal activity exception.

For the purpose of operational planning, it must be emphasized that the illegal activity exceptions cannot be cultivated against the vast majority of legally registered vessels flagged by other nations. Facts and circumstances will arise where an exception can be invoked, but only against a particular vessel, not the entire fleet of that country. Under current law, there is no clear authority to stop vessels solely because they are suspected of transporting WMD.

By identifying major sources of WMD, intelligence provides a useful estimate for

operational planners to prioritize counter-proliferation efforts. Chart 2 is an overlay of WMD programs and terrorist presence in fourteen countries that have the most of each.

CHART 2: WMD THREAT MATRIX See note[21] for Legend.

Country	NUCLEAR	BIO	CW	Missiles	Terror	REMARKS
NORTH KOREA	Y	Y	Y	Y	*	BWC CWC NPT WMD NEGOTIATIONS
IRAN	Y	Y	Y	Y	1*	BWC CWC NPT WMD NEGOTIATIONS
CHINA	Y	Y	Y	Y		BWC CWC NPT
RUSSIA	Y	Y	Y	Y		BWC CWC NPT MTCR
SYRIA	Y	Y	Y	*	WMD NEGOTIATIONS	
LIBYAY	Y		Y	*	BWC	WMD NEGOTIATIONS
PAKISTAN	Y	Y		Y	5	BWC CWC
INDIA Y	Y		Y		BWC CWC	
ISRAEL	Y			Y	8	CWC
VIETNAM			Y	Y		BWC CWC NPT
SUDAN				Y	*	BWC CWC NPT TERROR NEGOTIATIONS
EGYPT				Y	2	BWC NPT
YEMEN				Y	1	BWC CWC NPT
CUBA				Y	*	BWC CWC NPT

Procurement or theft of WMD may be presumed as an easier way for terrorists to obtain it, compared to the alternative of developing their own programs. Large-scale production of WMD requires significant facilities, as well as time and expense. Although large WMD programs are detectable by national intelligence networks, this cannot be done with absolute accuracy. The recent difficulties in ascertaining the status of Saddam Hussein's WMD programs are a poignant reminder of this challenge.[22] Modest quantities of biological or chemical weapons are relatively easy to produce. The amount of

radioactive material needed to make a small but lethal "dirty bomb" (Radiological Dispersal Device or RDD), could be obtained from more than "22,000 machines worldwide," located at "hospitals, universities, factories, construction companies and laboratories."[23] Therefore, Chart 2 is only the starting point for prioritizing WMD sources and potential threats.

B. Factor Time. Planners must improve the immediate situation, consistent with MDA, and "push out our maritime borders giving us more time to identify threats and more time to respond."[24] Improved MDA and intelligence about WMD movements will permit recognition of WMD shipments so that interdiction may be conducted, if necessary. Over time, stricter port security abroad will gradually reduce undetected WMD shipments.

International law can help add reaction time by authorizing interdiction on the high seas. Peacetime legal remedies include another doctrine for justifying approach and visit: self-defense. Article 51 of the United Nations Charter uses actual "armed attack" as the threshold and this is incorporated by reference into numerous security agreements.[25] It cannot be invoked merely to restrict the growth of an opponent's capabilities, because actions in self-defense must be consistent with the requirements for necessity and proportionality. It may be thought of as a trump card which can be only played when a threat becomes imminent.

National self-defense could be used to justify MIO if it were established that the transport of WMD toward the coastal nation constituted an imminent threat of armed attack. Interdiction on the high seas would be legally justified as both necessary to prevent the attack and proportional in response to the threat. Preemptive action in self-

defense lowers military risk by interdicting an attack before it occurs. It does so by raising political risks, as evidenced by the US quarantine of Cuba in 1962.

In an armed conflict, belligerent warships can "visit and search" any merchant vessel in international waters. The current War On Terrorism (WOT) does not invoke this power, but military operations against countries, in support of WOT, do qualify as armed conflicts under international law. Resolutions of the United Nations Security Council (UNSCR) can also authorize maritime interdiction. If the United States exercises national self-defense, is in armed conflict with a nation, or if a future UNSCR authorizes enforcement of non-proliferation against a nation, legal authority for high seas MIO would be available. Such authority to interdict WMD threats in international waters would provide more response time than beginning interdiction in a contiguous zone and enable the threatened state to pre-empt a WMD threat closer to its source than to its homeland waters.

C. Factor Force. Each PSI participant adds forces to the coalition, with varying amounts and quality. Thirteen of the current PSI participants are also NATO members.[26] Participants have a critical weakness and a critical strength in concentrating force to detect and intercept a WMD carrier. The weakness is that they simply cannot be everywhere at once. Thus, it is necessary to use information superiority and command and control to focus PSI forces and surveillance assets where they are required. This task is made easier by the fact that U.S. sea-based forces are routinely positioned 96 hours away from major shipping routes.[27]

When a threat is detected, the strength of PSI is that participants can muster sufficient force to overpower any potential WMD carrier. The historical record on MIO

shows the most boardings start with the master's consent to search. Gunfire is usually not required. Often, the scenario is a warship or one of its small boats approaching an unarmed or lightly armed vessel. Should a forcible boarding be necessary, superior force can be produced to disable the vessel with the warship's fixed weapons systems or to control it with an embarked Visit Board Search Seize Team (VBSST). The capabilities of a VBSST using a naval or Coast Guard crew would usually be superior to that of an unarmed or lightly armed crew. If not, more heavily armed VBSST, comprised of Marines or Special forces, could be provided. Once aboard, a VBSST can face a difficult task if the crew does not aid the search. Ships have hundreds of compartments. Voids and ballast tanks are hiding spots that can be welded shut. The contents of thousands of sealed containers, each the size of a truck, are described by lengthy bills of lading. These realities require proficient and properly equipped VBSST, especially because of the potentially small size of WMD.[28]

The overwhelming majority of nations have ratified treaties outlawing the proliferation of nuclear, chemical and biological weapons. The United Nations has 191 member states. The Treaty on the Nonproliferation Nuclear Weapons (NPT) has been accepted by over 188 members. The Chemical Weapons Convention (CWC) has been signed by 180 nations. The Biological and Toxin Weapons Convention (BWC) has been accepted by 176 nations.[29]

Normally, a treaty only binds nations that agree to it. However, customary international law holds that the widespread practice of nations is evidence of a duty and applicable to all nations. Therefore, NPT, CWC and BWC are enforceable against the non-signers under customary international law. Once there is legal authority to search a

foreign ship or aircraft, WMD may be seized if found.

Conventional weapons, explosives and ballistic missiles are not per se illegal. The Missile Technology Control Regime (MTCR), by which nations agree to the same export policies regarding missiles and missile technology, only has 33 signatories. Thus, MTCR does not have the force of customary international law. Enforcement against a non-signatory would require self-defense justification, armed conflict or a UNSCR against that nation. Likewise, it is within the sovereignty of nations to possess and transfer missiles or conventional weapons, unless a belligerency or a UNSCR makes armaments subject to seizure. Nations may make these categories of weapons subject to customs laws and possible seizure in territorial seas and contiguous zones. Chart 3 summarizes how international law makes it easier to seize WMD than ballistic missiles and conventional weapons. The caveat remains: legal authority for approach and visit is a prerequisite.

CHART 3: LEGAL AUTHORITY FOR SEIZURE OF WMD MATERIALS

	US			PSI NATION	
	TS	**CZ**	**High Seas**	**CZ**	**TS**
Nuclear	YES	YES	YES	YES	YES
Chemical	YES	YES	YES	YES	YES
Biological	YES	YES	YES	YES	YES
Ballistic Missiles	YES	YES	MTCR	YES	YES
Conventional Weapons	YES	YES	UNSCR	YES	YES

Key

CZ = Contiguous Zone

MTCR = Only if country of suspect vessel is: (a) MTCR member, (b) subject of arms embargo by UNSCR, (c) declared as a belligerent, or if required in self-defense.

TS = Territorial Sea

UNSCR = Only if country of suspect vessel is: (a) subject of arms embargo by UNSCR, (b) declared as a belligerent, or if required in self-defense.

III. The Proliferation Security Initiative: Recommendations for success.

The operational factors and legal framework discussed above provide a blueprint for operational design. The space, time and force relationships indicate objectives, centers of gravity, decisive points and critical vulnerabilities. The law provides every nation which participates in PSI with unique authority for conducting MIO in its national waters and on its vessels. Success of PSI military operations will depend on unity of effort: the participation of many countries – and their mastery of command and control, the dissemination of intelligence and decision-making based upon what can be seized, where, and by whom. Intelligence will be required to identify the production and shipment of potentially small-sized WMD packages over enormous space. The link between intelligence and legal authority for MIO means that PSI nations should enhance the capability to establish MDA about vessels approaching their national waters. Intelligence can justify pre-emptive self-defense actions, or an approach and visit under one of the six UNCLOS exceptions for illegal activity. The law can fill in gaps when intelligence is incomplete, so long as the facts support reasonable grounds to suspect illegal activity. This section offers recommendations pertaining to these issues.

A. The objective of PSI operations should be to compel acceptance of PSI.

Joint doctrine on the enforcement of sanctions instructs that MIO have military and political purposes.[30] This is sound guidance for deliberate and contingency planning in support of PSI. The desired end state for PSI is elimination of WMD proliferation to the maximum extent possible. The military objective for PSI is interdiction of WMD between source countries and terrorist organizations. The political objective is to compel proliferating nations to conform to PSI. A recent example is Libya's renunciation of its

WMD programs. Synchronized economic pressure and lengthy diplomatic negotiations were punctuated by the interdiction of nuclear centrifuge equipment destined for Tripoli.[31]

The center of gravity for the PSI coalition is its membership. Chart 4 shows how current PSI participation produces favorable Space-Force relationships in EUCOM and NORTHCOM, but poor ones in CENTCOM and PACOM. EUCOM has many PSI partners to track threat nations and PSI countries control all three super ports in the theater. Threat nations in PACOM outnumber PSI partners, who hold less than a third of the super ports. Location of a super port in a PSI nation subtracts a possible transit point for WMD shipments.

CHART 4: THE GEOGRAPHY OF PSI [See Note [32]]

Combatant Commander	PSI Nations	THREAT NATIONS	PSI/Threat Country Ratio	Chokepoints	Port Ratio	Ship Ratio
CENTCOM	0	EGYPT *IRAN *PAKISTAN+ SUDAN YEMEN	0:5	HORMUZ SUEZ CANAL	0/1	0/0
EUCOM	DE NE SP FR NO TU GE PO UK IT PT (LI)+	*ISRAEL *LIBYA+ *SYRIA *RUSSIA	11:4	DARDANELLES ENGLISH CHANNEL GIBRALTAR	3/3	4/7
NORTHCOM	US CA	CUBA	2:1	0	5/5	1/2
PACOM	AU JA SI	*CHINA *INDIA * NORTH KOREA *VIETNAM	3:4	MALACCA TAIWAN TSUSHIMA	+2/7	2/4
SOUTHCOM	0	0	0:0	PANAMA CANAL	0/0	0/1

Chart 4 takes data from Chart 2(WMD Threat Matrix) and notes 7 (PSI participants), 16 (chokepoints and superports) and 19 (merchant ship registration) . Asterisks are Threat Nations which are major WMD sources. Plus signs are positive trends which are explained in note 32. Two letter abbreviations are PSI nations and defined in note 32. The PSI nation/Threat country ratio compares both numbers in those respective columns. Chokepoints lists the name of the strait or channel. “Port ratio” is how many “super ports” are located in PSI nations versus the total number in the AOR. “Ship ratio” is how many of the world’s largest merchant fleets are flagged by PSI nations versus the total number in the AOR.

A threat nation's acceptance of PSI removes a proliferation source or recipient and adds space where PSI is followed. International law makes it easier for PSI participants to seize WMD in their own territorial seas and contiguous zones than on the high seas. PSI operations in a partner's national territory, waters and airspace enhances the legitimacy of the coalition.

Chart 4 shows that decisive points will be the compliance of a threat nation, super port or large merchant fleet with PSI. This helps identify priorities for synchronized measures. Egypt should be a priority for CENTCOM because that country controls the Suez Canal, one of the listed chokepoints. Acceptance of PSI by Egypt would therefore be a decisive point. In EUCOM, Russian participation in PSI would be a decisive point because it is a WMD source country. Using the Liberia agreement as a model, bilateral agreements for consent boardings with the Bahamas, Cyprus, Greece, Malta will bring EUCOM and NORTHCOM ship ratios to 100%. China is a decisive point for PACOM: it is a threat nation and host to a superport as well as the owner of a large merchant fleet. In SOUTHCOM, Panama controls a major chokepoint and holds the world's largest registry of commercial vessels.

B. Focus on WMD Source countries. PSI targets a center of gravity for terrorist groups: their ability to receive WMD. Terrorist groups are numerous, covert and mobile. It can difficult to identify their lines of communication and predict the locations where they could receive WMD. By contrast, countries have fixed and well-known seaports. Most countries value their economic and political relationships with the international community. The fact that major WMD sources are countries is a critical vulnerability for terrorists desiring WMD. As the Libyan example shows, WMD source countries can be

influenced by instruments of national power, and decide to assist PSI instead of terrorist networks. In their Theater Security Cooperation Plans, combatant commanders should consider WMD source countries as critical vulnerabilities and determine how military interdiction of WMD can be synchronized with political, economic and information instruments in their theaters.

C. Stop drug money that can buy WMD. NSCT observes that drug trafficking produces "vast sums of money for international organized crime syndicates and terrorist organizations."[33] Diminishing drug traffic that funds terrorist groups impairs their ability to purchase or develop WMD. International law makes this connection a critical vulnerability: PSI nations may legally conduct MIO on the high seas against suspected drug traffickers. PSI counter-drug operations will harm terrorist networks while remaining consistent with the principles of legitimacy and restraint.

D. Use NATO architecture for large-scale exercises with PSI nations.

The birth of PSI was followed by a series of five meetings among the coalition participants over a seven month period.[34] The heavy presence of NATO countries participating in PSI gives the coalition an advantage: The NATO command structure, ROE and information assurance agreements can and should be used for PSI operations. This will save military planners valuable time and make it easier to incorporate the participation of new members. Operations with non-NATO teammates will require the use of NATO standardization agreements to ensure information assurance.[35] "Sanitized" ROE, based upon NATO content, will have to be used to safeguard NATO ROE from compromise. The NATO standardization agreement should also be considered the basis for Memoranda of Understanding (MOU) with appropriate foreign agencies for

information assurance. Use of a standardization agreement will foster shared intelligence on WMD matters throughout the PSI membership.

E. Conduct Combined Exercises and Deployments. Command and control will be critical for PSI participants to focus surveillance and intelligence assets and determine where interdiction is required. Mastery of it will leverage the PSI coalition's advantage in force and ensure unity of effort. The tasks of command and control, communicating and disseminating and using intelligence for large-scale MIO will not be satisfactory for contingencies without exercises. Combined exercises and deployments will allow the PSI coalition to practice skills. It will validate planning for operations in support of possible UNSCR against WMD source countries. At least five PSI exercises have been conducted and many more are desired during 2004.[36] There are a host of legal issues arising from actual WMD seizures during MIO.[37] Exercises should be used to determine policies and Tactics, Techniques and Procedures (TTP).

(1) Deploy PSI warships with US battle groups. Deployment of a PSI coalition vessel as a regular part of a US battle group would enhance capabilities for PSI operations. A warship from a host nation brings another nation's sovereign power for "same flag" boardings. Many navies have law enforcement authority in the host nation's contiguous zone and territorial seas, expanding the potential area of operations. Combined deployments would test the integration of command and control in varied environments and over an extended time.[38]

***(*2) Conduct a US Navy-Coast Guard exercise.** When the United States hosts a PSI exercise, inclusion of the Coast Guard (USCG) will avoid a possible seam between its sea services. USCG has law enforcement authority and is the lead federal agency for MDA

and interdiction in our territorial seas and contiguous zones. The Navy has more surveillance assets, but no law enforcement authority. American response to shipment of WMD toward the homeland would likely involve both armed forces to leverage their respective capabilities. Exercises must validate contingency planning for Navy-Coast Guard MIO of WMD.

F. Share intelligence among PSI participants. The peacetime justifications for interdiction on the high seas, based on six kinds of illegal activities and self-defense, highlight the relationship between intelligence and legal authority. If operational commanders possess the information superiority and can disseminate evidence of a vessel's illegal activity, or the threat of an imminent attack, legal justification for interdiction may be obtained. Interagency and international resources can improve MDA concerning WMD movements and the effectiveness of VBSST searches for WMD. Sharing intelligence about WMD among PSI armed forces and civilian agencies will further promote unity of effort.

(1) Use interagency resources. The combatant commander has an intelligence team, including interagency professionals, to tap into the national architecture that monitors WMD activities. The Commander's Critical Information Requirements (CCIR) to support PSI operations will be different from concentrating on the notional enemy's order of battle. Data is needed on merchant vessels, storage capabilities and normal operations. Maritime shipping expertise is required to decipher bills of lading. It may not be possible to add a maritime shipping expert to the combatant commander's staff, as other agencies may have higher priority, but liaison with them is essential. U.S. customs inspectors and USCG foreign port liaison officers are potential resources to obtain CCIR or to provide

training. USCG has "Maritime Safety and Security Teams" (MSST), designed to deploy and protect ports in the homeland. Four MSST have been commissioned and each is comprised of approximately 100 active duty and reserve personnel. One MSST specialty is WMD detection.[39] This capability, coupled with the additional expertise, will enhance capabilities to detect WMD shipments. If maritime agency resources and MSST are tapped to train VBSST, improvement in the ability to detect fraud and WMD would almost certainly result. Interagency cooperation can bring new knowledge, and be the meat of state-of-the-art TTP for shipboard searches.

(2) Use international resources. The State Department is the lead agency for International Law Enforcement Academies (ILEA), and with the Departments of Justice and Treasury as its partners, have "trained over 8,000 officials from 50 countries."[40] ILEA alumni are an example of a potentially valuable pool of international talent. Their credentials as ILEA alumni make them a possible source for Defense Attaches to call on for answers to CCIR about that nation's maritime companies and procedures. Through coordination with the combatant commander's staff, ILEA graduates might assist as liaison or interpreters to increase the effectiveness of shipboard searches.

G. The Law can justify MIO when intelligence is specific – and when it isn't.

(1) Use restraint when asserting the right to national self-defense. Release of biological or chemical weapons in a territorial sea would risk damage to the mainland, any vessels or islands within that territorial sea, and the Exclusive Economic Zone (EEZ), which can extend to 200 nautical miles. Actual damage would depend on weather and the size and type of WMD employed. If the WMD device is nuclear, the higher effective ranges of nuclear device could yield damage well within a 24 mile radius, eclipsing both

the territorial sea and contiguous zone. WMD placed on a ballistic missile would allow an attack from the high seas to reach the homeland. Two lessons emerge from these examples. First, intelligence and MDA will be essential to obtain legal justification for self-defense. Second, there are situations where high seas MIO is a necessity, and should be so asserted.

Terrorist control of an operational ballistic missile with a WMD payload presents an extraordinary military threat, making the necessary distance for a MIO dependent on the range of the threatening missile. But if the missile cannot be launched at sea, or the WMD is not inside a dispersal device, a high seas MIO might not be essential. A vessel hiding a low-range biological agent in its cargo for use on land, could be handled more discretely: track its high seas transit, (covertly with a submarine, if desired,) and intercept it just inside contiguous waters, and thus avoid the political risk of a high seas MIO. Therefore, intelligence that WMD is being transported by sea toward the homeland is only the first of many questions that must be answered to provide a self-defense justification for MIO. Depending on the facts, the necessity to intercept the WMD shipment could vary from 150 nautical miles to prevent the sea-based launch of a WMD missile, to a modest twenty-eight miles (four nautical miles outside the contiguous zone) to avoid activation of a WMD dispersal device inside the contiguous zone, or inside the contiguous zone to seize WMD intended for use ashore.[41] Solid MDA will permit decision makers to distinguish the threats in each of those three hypothetical situations and assert actions in self-defense that are commensurate with each threat.

This must be done with care. Preemptive action to lower military risk will raise political risk. The objective of PSI will fail if the United States is alone in attempting

counter-proliferation because a critical strength is a multinational unity of effort. Self-defense options must be balanced with restraint to foster international cooperation. Improved MDA will help manage this political risk by providing the granularity to define threats more precisely.

(**2) Assert the right to conduct searches.** Consistent with the principle of restraint, international law already provides modest exceptions for high seas MIO. Because of the importance of drug money to terrorist funding, counter-narcotics MIO is a particularly useful exception. Using the peacetime legal framework, operational commanders have discretion as to how robustly to use the power to approach and visit. A risk-averse approach is one option, where approach and visit would only be conducted when there is tangible evidence about a particular vessel, such as intelligence that narcotics was loaded as cargo. At the other end of the spectrum is a more assertive rule, using the UNCLOS legal standard of "reasonable grounds."[42] The facts that a boat is visually low in the water and navigating along a possible drug route permits the inference that the vessel may be engaged in drug trafficking.

Similarly, guidance to conduct MIO "to the maximum extent possible" is distinct from instructions to conduct MIO "if possible and without adverse impact on other operations." All of these choices are within an operational commander's discretion and will depend on a host of factors – the availability of assets, operational risk, impact on time. It is a matter of whether to direct forces to search, and if so, how aggressively to do so. Guidance provided to commanding officers will produce different decisions about whether to conduct MIO events and different outcomes. Operational leaders can close gaps in specific intelligence through the willingness to ask masters for a consent search,

or to make a "go" decision on less than perfect information. Until MDA matures, commanders must exercise their discretion to authorize approach and visit, when the circumstances permit.

IV. Conclusion: The "road to survival or ruin."[43]

Several truths emerge about the future of PSI. First, the risk of WMD attack "from the sea" will be commensurate with gaps in our MDA. Legal authority needs facts derived from intelligence to power it, and military force to make it reality. It follows that only 100% MDA will give our forces the opportunity to stop all WMD threats in our territorial sea or contiguous zone. The problem for the operational commander is that we do not have 100% MDA, perhaps 100% MDA is unattainable. There will continue to be large gaps in coverage because WMD transport is not one of the six exceptions recognized by UNCLOS to impede free navigation and because WMD can be small and therefore easy to hide aboard large vessels.

The second truth is that we need more MDA. The solution is to grow it, region by region, by including foreign militaries and agencies in our training, exercises, deployments and intelligence sharing. Fortunately, there is sufficient legal framework to begin these tasks. The law shapes planning for PSI. It defines the geographic areas where MIO can be authorized and the participating countries from which consensual boardings can be expected. Intelligence about specific WMD movements can harness legal authority for high seas interdiction when consent cannot be obtained.

This leads to the third conclusion, that MDA and PSI membership are the keys to the success of PSI. Both increase the space and number of situations in which MIO can be executed. Both make MIO more productive. Better information enhances MIO

targeting. PSI members can reduce the number of potential MIO targets by ensuring the security of vessels before they leave port.

The relatively low MDA at present creates high military risk. Operational commanders must use the right mix of force over a vast area of space, now, to mitigate or pre-empt the military risk. They must plan operations that will attain the PSI objective of curtailing WMD proliferation to terrorists. Conducting MIO exercises and actual seizures against WMD suspects contributes to both these objectives, reducing risk and contributing to MDA. And it builds a customary law precedent for the peacetime right of approach and visit to stop WMD trafficking.

The strategic vision of NSCT is to make clear that all acts of terrorism will be viewed in the same light as slavery, piracy, or genocide . . . and "to establish a new international norm regarding terrorism requiring non-support, non-tolerance, and active opposition to terrorists."[44] The robust use of MIO, combined with expanding PSI membership, will, over time, make a warship's search for WMD on the high seas part of customary international law. PSI may also provide the international political support for a future UNCLOS article to that effect. Time will shape the battle space. Perseverance and successful PSI operations will improve MDA and port security while perfecting legal authority to interdict illegal WMD transport on the high seas. Alternatively, failure permits another 9/11 attack. Whether time will be in our favor, or to our detriment, depends on what operational commanders do today against the known threats with the peacetime rules – and the law.

NOTES

1. Quoting President George W. Bush, "National Security Strategy for the United States," (hereinafter "NSS"),(Washington, DC: September 2002), 13. The "National Strategy to Combat Weapons of Mass Destruction," (hereinafter NSCWMD) also uses the President's definition for WMD as "nuclear, biological and chemical" weapons. State Department, "National Strategy for Combating Weapons of Mass Destruction,"(Washington DC: December 2002) 1. In this paper, the NSCWMD definition for WMD will also be used.

2. Quoting President Bush. U.S. State Department, "National Strategy for Combating Terrorism," (hereinafter "NSCT"), (Washington, DC: February 2003), 11.

3. The evidence included money transfers from Yemen to North Korea and satellite footage of Scud fuel-oxidizer being loaded into shipping containers. The latter enabled analysts to narrow identification of the vessel carrying the Scuds to one of "three likely ships." So San was pinpointed after it "took a zigzag course and lowered and raised its flag, as if trying to shake off any pursuer." Carla A. Robbins, "Why U.S. Gave U.N. No Role in Plan to Halt Arms Ships" The Wall Street Journal, 21 October 2003, p.1.

4. The narrative is based upon three news accounts: (i) Ibid. (ii) Jong-Heon Lee, "North Korea: Ship interception 'piracy,'" The Washington Times, <http://dynamic. washtimes.com/twt-print.cfm?ArticleID=20021213-021722-5264r. [13 December 2002]. (iii)"Yemen Claims Scuds, Protests to U.S."MSNBC News <http://msnbc.com/ news/ 845880. asp?0cv=CA01 [11 December 2002].

5. There is some debate about whether or not confiscation could have been justified, but little doubt that there was no authority to seize the Scuds. Conventional missiles are not contraband subject to seizure. Neither North Korea or Yemen are signatories to the Missile Technology Control Regime (MTCR), the only international agreement which would have authorized seizure. There are no U.N. resolutions imposing weapons embargoes against Yemen. Professor Ruth Wedgewood has opined that seizure of piracy cargo or alternatively, that Yemen's previous written "pledge" not to import Scuds, should have justified confiscation. See Ruth Wedgewood, "A Pirate is a pirate," Wall Street Journal, 16 December 2003. These arguments are tempting but easily countered. There was no evidence So San was involved with piracy and the facts leading to her "stateless" category justified boarding and search only. Treaties or consent at the time of seizure are the usual standards for impressing cargo. The US took great pains to avoid the appearance of pretext, as the Wall Street Journal account (See Robbins, note 4 above) indicated: Security Council resolutions against Iraq were not used as authority to board So San because its destination was clearly Yemen and not Iraq. Some speculate that the US decided to the Scuds pass to Yemen in exchange for greater assistance with terrorism. That theory dismisses that other instruments could have used to entice Yemen's support without creating an embarrassing situation for our Spanish allies when the missiles were released. Others suggest that a desire not to provoke North Korea was the core. This

hypothesis does not explain the interdiction of five North Korean vessels over a six-month period beginning in March 2003. Neither political theory squares with the law, as discussed above and in section II.3 below. Accordingly, the premise for this paper assumes that no credible legal reason existed to seize the Scuds.

6. President Bush announced PSI in Krakow, Poland during a G8 Summit. Previously, in addition to NSS, the U.S. Department of State (hereinafter "State") had issued NSCWD in December 2002, and NSCT in February 2003.

7. With the original announcement of PSI, there were eleven nations participating: Australia, France, Germany, Italy, Japan, the Netherlands, Poland, Portugal, Spain, the UK and the US. By 17 December 2003, there were five additional countries: Canada, Denmark, Norway, Singapore and Turkey.

8. On September 4, 2003, an unclassified "Statement of Interdiction Principles," was made public, calling on participants to share intelligence and take actions against WMD moving through their territories, seas and airspace. It appears as Appendix A.

9. "Statement of Interdiction Principles," 1.

10. The Unified Command Plan of 30 April 2002, made combatant commanders "the single DOD point of contact within the assigned geographic AOR for countering the proliferation of weapons of mass destruction in support of nonproliferation policies, activities and tasking." Quoting U.S. President, "Unified Command Plan,"(Washington DC: 30 April 2002) at paragraph 12j. NSCT established State as the lead agency and recognized the need to "synchronize" State and Department of Defense efforts "by developing specific regional strategies for the defeat of terrorism" and "ensuring appropriate allied participation with the regional Combatant Commanders as they prosecute the war on terrorism." Quoting NSCT, 17.

11. Is it maritime "interception" or "interdiction" operations? Either. Joint Chiefs of Staff, Joint Doctrine for Operations Other Than War, Joint Pub. 3-07. (Washington, DC: 16 June 1995): GL-5 defines the term "Maritime Interception Operations": "Operations which employ coercive measures to *interdict* the movement of certain types of designated items into or out of a nation or specified area." (Italics mine.) This paper uses MIO to abbreviate the Joint Pub. 3-07 definition synonymously with the words "interception" or "interdiction."

12. Quoting John R. Bolton, Under Secretary of State for Arms Control and International Security. "Nuclear Weapons and Rogue States: Challenge and Response," <http://www.state.gov/t/us/rm/26786pf.htm[December 2, 2003]. He did not name the 50 countries.

13. Coast Guard, "Maritime Strategy for Homeland Security," (Washington, DC: 23 December 2002), 32 defines MDA as: "comprehensive information, intelligence and knowledge of all relevant entities within the U.S. Maritime Domain - and their respective

activities - that could affect America's security, safety, economy or environment."

14. "Vessel movement reports are initially intended for designated vessels entering or departing the United States, regardless of flag. Current reporting requirements that exempt smaller vessels from movement reporting will be reexamined in light of the terrorist threat that can still be posed by smaller vessels." Ibid., 23. "USCG will work with the International Maritime Organization to establish "international maritime security measures that will complement this Maritime Strategy. Port security liaison officers will be assigned abroad to assist and coordinate the efforts of the Coast Guard's international partners." Ibid., 24.

15. "Maritime Strategy for Homeland Security,"18 and Guy Thomas "A Maritime Traffic-Tracking System: Cornerstone of Maritime Homeland Defense" Naval War College Review, (Autumn 2003) 139. .

16. "U.S. Navy capabilities brief" Joint Military Operations CD ROM, Newport: Naval War College, 2002. Five of the sixteen "super ports" are within the United States, three are in Europe. Others are located in China, Hong Kong, India, Japan, Singapore, South Korea, Taiwan and the sixteen in Southwest Asia. The choke points are: Panama Canal, English Channel, Straits of Gibraltar, Dardanelles Strait, Suez Canal, Straits of Hormuz, Straits of Malacca, Taiwan Strait, Tsushima Straits.

17. Lloyd's Maritime Information Unit boasts it has 100,000 vessels of that minimum weight registered in its "confidential directory" accessed through www.seaway.co.uk . [24 January 2004]. The U.S. Coast Guard maintains a database of its contact with vessels in the Port Information State Exchange (PISX), which recognizes over 200 jurisdictions for which a vessel may be flagged. <http://cgmix.uscg.mil/pisx/pisx/psix2 [24 January 2004].

18. "Deal Lets US Search Ships," New York Times, February 14, 2004. The article announces the bilateral agreement and describes Liberia as holding the second largest shipping registry worldwide, with over 2,000 vessels registered. The State Department press release announcing the agreement says it is "modeled after similar agreements that exist in the counter-narcotics arena." "Proliferation Security Initiative Ship Boarding Agreement Signed with Liberia." > http://www.state.gov/r/pa/prs/ps/2004/29338pf.htm [February 12, 2004]

19. The statistical data about world shipping registries uses 2001 data. In that year, the following nations, which are now PSI members, registered the largest merchant fleets: Singapore, Norway, US, Japan, Italy and Germany. Those six PSI nations registered 3,661 vessels, while Liberia had the second largest shipping registry with 1,735 vessels. The six PSI nations and Liberia accounted for 5,396 registers of the worldwide total of 30,293, or 17.8 % Source: U.S. Transportation Department, Maritime Administration, "MARAD 2001: Maritime Administration's Annual Report to Congress," Washington, DC: 2001, 41. No data was available from MARAD 2001 on the size of merchant fleets for the other ten PSI nations.

20. These exceptions are codified in Article 108 and 110, United Nations Law of the Sea Convention (UNCLOS). The text of UNCLOS Articles 108 and 110 is provided in Appendix B.

21. BIO are Biological Weapons and CW are Chemical Weapons. "Terror" indicates the number of known terrorist groups which operate in that country. An asterisk means the country was considered a state sponsor of terrorism in NSCT. The remarks column notes if there are ongoing diplomatic negotiations about WMD programs or sponsorship of terrorism and which major agreements against WMD it has signed: Biological Weapons Convention (BWC), Chemical Weapons Convention (CWC), Non-Proliferation Treaty (NPT), Missile Technology Control Regime (MTCR). Chart 2 does not reflect the general friendliness or hostility toward the West. Data is based upon Kenneth Katzman, "Terrorism: Near Eastern Groups and State Sponsors, 2001" CRS Report to Congress, (Washington, DC: Congressional Research Service 10 September 2001) and James Fitzsimonds,"Weapons of Mass Destruction," (Newport: Naval War College, 2000). Omitted is Iraq, in the process of disarmament as a consequence of OPERATION IRAQI FREEDOM and Afghanistan whose sponsorship of terrorism was ended by OPERATION ENDURING FREEDOM. Six other nations have at least one terrorist group but no WMD: Algeria, Columbia, Lebanon, Philippines, Turkey, Uzbekistan. Britain and France, both nuclear powers, are not listed.

22. "American intelligence officials failed to detect that Iraq's unconventional weapons programs were in a state of disarray . . ." James Risen, "CIA Lacked Iraq Arms Data, Ex-Inspector Says," New York Times, 26 January 2004, sec. 1, p.1. Underestimating of the maturity of WMD programs is also a risk. In the summer of 2003, North Korea "surprised" the world with more advanced ballistic missile and nuclear capabilities than previously believed.

23. Central Intelligence Agency, "Terrorist CBRN: Materials and Effects,"<http:// www.cia.gov/cia/reports/ terrorist_cbrn [December 17, 2003] 5, discusses possible locations of radioactive materials. The 22,000 figure is from Fitzsimonds, 16.

24. Quoting President Bush, "Remarks by the President on Homeland Security, Port Elizabeth, New Jersey," <http://www.whitehouse.gov/news/releases/2002/06/print/ 20020624-1.html [June 24, 2002]. The President's remarks referenced the Coast Guard's "Deep Water Project" and its relationship to initiatives by port authorities and the Customs Service to improve port security in the United States.

25. The text of Article 51 is provided in Appendix B.

26. The thirteen NATO nations which are also PSI participants are: Canada, Denmark, France (treaty signatory only), Germany, Italy, Netherlands, Norway, Poland, Portugal, Spain, Turkey, UK and US.

27. "U.S. Navy Capabilities Brief," Joint Military Operations CD-ROM.

28. Dirty bombs or Radiological Dispersal Devices (RDD), could be as small as a backpack, potentially requiring VBSS teams to conduct a very thorough search. "Terrorist CBRN: Materials and Effects," 5. Chemical weapons usually "require bulk application," while some biological weapons only need "ten grams" to accomplish the same effect. Compare Stephen Rose, "Soft Weapons and Hard Choices" (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1989) 6; with Guy Roberts, "The Counterproliferation Self-Help Paradigm: A Legal Regime for Enforcing the Norm Prohibiting the Proliferation of Weapons of Mass Destruction," Denver Journal of International Law and Policy (Vol. 27, 1999): 493-4 and note 49.

29. As of this writing, UN membership is unchanged since April 24, 2003. The materials prohibited by NPT and BWC are clear. Article I of NPT prohibits the transfer of nuclear weapons, nuclear explosive devices and items that would assist in the manufacture of nuclear weapons. Article I of BWC prohibits "microbial or other biological agents, or toxins" and "weapons, equipment or means of delivery." CWC identifies specific chemicals, but the regime is more complicated because some are dual-use (military and commercial applications). There are guidelines to define chemicals in one of three categories, corresponding to highly toxic chemicals and two schedules for dual-use chemicals. Also covered are a fourth category of dangerous "unscheduled discrete organic chemicals" (UDOC) known as PSF chemicals: phosphorus, sulfur or fluorine. This makes the process of identifying prohibited substances more complex and subjective. Currently, the three schedules list a total of 16 toxins and 28 precursors.

30. U.S. Joint Chiefs of Staff. Joint Doctrine for Military Operations Other Than War Joint Pub. 3-07, (Washington DC: 16 June 1995), III-3.

31. Reuters, "US Presses Russia to Join Arms Body," The Moscow Times, 29 January 2004. p. 3.

32. The overlay is drawn from the perspective of the five geographic combatant commanders, as defined by the current UCP. The plus sign for Pakistan reflects that country's investigation and denunciation of alleged transfers of atomic program information to Iran. "General Denies Letting Secrets of A-Bomb out of Pakistan," New York Times, 27 January 2004, p.A6. The plus sign for Libya reflects the fact that country has recently renounced its WMD programs, making the ratio even more favorable in EUCOM. "Libya: No More Weapons of Mass Destruction," Newport Daily News, 20+21 December 2003, sec. 1. p. 1. The plus sign for the super port ratio in PACOM reflects Taiwan's cooperation in detaining the North Korean vessel, Be Gaehung in Kaohsiung Harbor, because the ship was carrying chemical precursors. "Ship's Seizure Sends Signal to North Korea," Christian Science Monitor, 12 August 2003. The two letter abbreviations for PSI nation are: Australia (AU), Canada (CA), Denmark (DE), France (FR), Germany (GE), Italy (IT), Japan (JA), Liberia (LI), Netherlands (NE), Norway (NO), Poland (PO), Portugal (PT), Singapore (SI), Spain (SP), Turkey (TU) and United Kingdom (UK). The inclusion of Liberia and plus sign indicates its bilateral agreement with the US, as discussed in note 18, above. See note 19 to identify which PSI nations

have the largest merchant fleets as indicated in the numerator of the "Ship ratio." Non-PSI nations with the largest vessel registries are grouped by AOR: EUCOM (Greece, Malta, Cyprus), NORTHCOM (Bahamas), PACOM (China, Marshall Islands), SOUTHCOM (Panama). Source: "MARAD 2001," 41. Of note, Panama flagged the 5,120 vessels in 2001, making it the largest registry. Its participation as a PSI nation would almost double the number of vessels available for consent boardings and raise the fraction of the world's merchant ships accessible to the PSI coalition to 34%. Ibid.

33. NSCT, 22.

34. There have been five meetings of the PSI participants at the following locations: (a) Madrid in June 2003, (b) Brisbane in July 2003, (c) Paris in September 2003, (d) London in October 2003, and (e) Washington, D.C. in December 2003. State Department, Bureau of Nonproliferation, "Nuclear Weapons and Rogue States: Challenge and Response," <http://www.state.gov /t/us/rm/26786pf.htm [December 2, 2003].

35. This will simplify the issue of information assurance, permitting combatant commanders to use the NATO standardization agreement "as a basis for establishing rules and policies for conducting joint intelligence operations." Joint Chiefs of Staff, Doctrine for Intelligence Support to Joint Operations, Joint Pub.2-0, (Washington DC: 9 March 2000) vii. "The appropriate US geographic combatant commander should issue clearly stated guidelines for the release of classified US information to the MNF (Multi-National Force)." Joint Chiefs of Staff, Joint Doctrine for Multinational Operations, Joint Pub. 3-16, (Washington DC: 5 April 2000) IV-3. The instruction also provides that guidelines will be "based on existing policy directives and any applicable approved exceptions to the national disclosure policy. These guidelines should be issued to US participants only and should be specific enough to allow implementation down to the tactical level." Ibid.

36. The five exercises have varied in their locations, the Mediterranean, the Arabian Sea and the Pacific. At least five more are planned. Future exercises will be hosted by different PSI nations and will include air interception as well as maritime interdiction. Ibid.

37. Actual execution of a MIO embraces several legal issues: (a) the conduct of the physical search, (b) diversion of the suspect vessel so that a proper or safe search may be done, (c) detention of persons interfering with the search and (d) use of force by VBSS to complete their assigned tasks. If the VBSS is successful in locating WMD or terrorists, additional issues arise: (e) what to do with captured WMD materials, (f) where will persons be detained and to what authorities will they be handed over? (g) what sort of prosecution and due process must be guaranteed for them? These are all valid concerns which impact operational responsibilities, but are beyond the scope of this paper. Because they will arise during operations, it is beneficial to conduct exercises so that policy, doctrine and procedures can be developed.

38. As OEF demonstrated, the technical issue that will need resolution in this regard is

providing secure communications for use among all naval coalition participants. Phil Wisecup and Tom Williams, "Enduring Freedom: Making Coalition Naval Warfare Work," U.S. Naval Institute Proceedings, (September 2002): 52. In August 2003, USS ENTERPRISE (CVN 65) and its battlegroup deployed with an Argentine vessel. Jack Dorsey, "Navy Developing Plans To Deploy, Train Overseas With Foreign Fleets," The Virginian-Pilot, August 15, 2003.

39. Coast Guard "Fact Card on Maritime Safety and Security Teams," < http://www.uscg.mil/hq/g-cp/comrel/factfile/Factcards/MSST.htm [23 JAN 2004].

40. Bureau for International Narcotics and Law Enforcement Affairs, "Fact Sheet-International Law Enforcement Academies," http://www.state.gov/ g/inl/rls/fs/20280pf.htm [May 7, 2003].

41. Notional missile range was taken from Fitzsimonds, 23. 300km (150 nautical miles) corresponds to the Chinese M-11 and North Korean Scud. Not mentioned in the text is the range of the Chinese CSS-4, which is 14,000km. The four nautical mile distance from the contiguous zone assumes the US would want to avoid release inside the contiguous zone as well as the notional effective ranges for chemical, biological and nuclear devices also contained in Fitzsimonds. The four nautical mile range would required for a chemical weapon, based upon the eight kilometer effective range from the "inadvertent release of 40 tons of Methyl Isocyanate from a Union Carbide plant at Bhopal, India December of 1984." Ibid.,11.

42. "Reasonable grounds" is the legal standard for a visit and search per Article 110 of the United Nations Law of the Sea Convention (UNCLOS). Appendix B has the complete text of that article.

43. Approximately 26 centuries ago, Sun Tzu said: "War is a matter of vital importance to the State; the province of life or death, *the road to survival or ruin*. It is mandatory that it be thoroughly studied." (Italics mine.) Quoting The Art of War, Sam Griffith, Samuel B. translator, Oxford University Press, Oxford (1963) at I.1. The same should be said today of WMD proliferation and the countermove of PSI.

44. Quoting NSCT, 23-4.

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Statement of Interdiction Principles

The Proliferation Security Initiative (PSI) is a response to the growing challenge posed by the proliferation of weapons of mass destruction (WMD), their delivery systems, and related materials worldwide. The PSI builds on efforts by the international community to prevent proliferation of such items, including existing treaties and regimes. It is consistent with and a step in the implementation of the UN Security Council Presidential statement of January 1992, which states that the proliferation of all WMD constitutes a threat to international peace and security, and underlines the need for member states of the UN to prevent proliferation. The PSI is also consistent with recent statements of the G8 and the European Union, establishing that more coherent and concerted efforts are needed to prevent the proliferation of WMD, their delivery systems, and related

materials. PSI participants are deeply concerned about this threat and of the danger that these items could fall into the hands of terrorists, and are committed to working together to stop the flow of these items to and from states and non-state actors of proliferation concern.

The PSI seeks to involve in some capacity all states that have a stake in non-proliferation and the ability and willingness to take steps to stop the flow of such items at sea, in the air, or on land. The PSI also seeks cooperation from any state whose ships, flags, ports, territorial waters, airspace, or land might be used for proliferation purposes by states and non-state actors of proliferation concern. The increasingly aggressive efforts by proliferators to stand outside or to circumvent existing non-proliferation norms, and to profit from such trade, requires new and stronger actions by the international community. We look forward to working with all concerned states on measures they are able and willing to take in support of the PSI, as outlined in the following set of "Interdiction Principles".

Interdiction Principles for the Proliferation Security Initiative:

PSI participants are committed to the following interdiction principles to establish a more coordinated and effective basis through which to impede and stop shipments of WMD, delivery systems, and related materials flowing to and from states and non-state actors of proliferation concern, consistent with national legal authorities and relevant international law and frameworks, including the UN Security Council. They call on all states concerned with this threat to international peace and security to join in similarly committing to:

1. Undertake effective measures, either alone or in concert with other states, for interdicting the transfer or transport of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern. "States or non-state actors of proliferation concern" generally refers to those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through : (a) efforts to develop or acquire chemical, biological, or nuclear weapons and associated delivery systems; or (b) transfers (either selling, receiving, or facilitating) of WMD, their delivery systems, or related materials.

2. Adopt streamlined procedures for rapid exchange of relevant information concerning suspected proliferation activity, protecting the confidential character of classified information provided by other states as part of this initiative, dedicate appropriate resources and efforts to interdiction operations and capabilities, and maximize coordination among participants in interdiction efforts.

3. Review and work to strengthen their relevant national legal authorities where necessary to accomplish these objectives, and work to strengthen when necessary relevant international laws and frameworks in appropriate ways to support these commitments.

4. Take specific actions in support of interdiction efforts regarding cargoes of WMD, their delivery systems, or related materials, to the extent their national legal authorities permit and consistent with their obligations under international law and frameworks, to include:

a. Not to transport or assist in the transport of any such cargoes to or from states or non-state actors of proliferation concern, and not to allow any persons subject to their jurisdiction to do so.

b. At their own initiative, or at the request and good cause shown by another state, to take action to board and search any vessel flying their flag in their internal waters or territorial seas or areas beyond the territorial seas of any other state that is reasonably suspected of transporting such cargoes to or from states or non-state actors of proliferation concerns, and to seize such cargoes that are identified.

c. To seriously consider providing consent under the appropriate circumstances to the boarding and searching of its own flag vessels by other states and to the seizure of such WMD-related cargoes in such vessels that may be identified by such states.

d. To take appropriate actions to (1) stop and/or search in their internal waters, territorial seas, or contiguous zones (when declared) vessels that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and to seize such cargoes that are identified; and (2) to enforce conditions on vessels entering or leaving their ports, internal waters or territorial seas that are reasonably suspected of carrying such cargoes, such as requiring that such vessels be subject to boarding, search, and seizure of such cargoes prior to entry.

e. At their own initiative or upon the request and good cause shown by another state, to (1) require aircraft that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and that are transiting their airspace to land for inspection and seize any such cargoes that are identified; and/or (2) deny aircraft reasonably suspected of carrying such cargoes transit rights through their airspace in advance of such flights.

f. If their ports, airfields, or other facilities are used as transshipment points for shipment of such cargoes to or from states or non-state actors of proliferation concern, to inspect vessels, aircraft, or other modes of transport reasonably suspected of carrying such cargoes, and to seize such cargoes that are identified.

Article 108, United Nations Law of the Sea Convention
Illicit traffic in narcotic drugs or psychotropic substances

1. All States shall cooperate in the suppression of illicit traffic in narcotic drugs and psychotropic substances engaged in by ships on the high seas contrary to international conventions.
2. Any State which has reasonable grounds for believing that a ship flying its flag is engaged in illicit traffic in narcotic drugs or psychotropic substances may request the cooperation of other States to suppress such traffic.

Article 110, United Nations Law of the Sea Convention
Right of visit

1. Except where acts of interference derive from powers conferred by treaty, a warship which encounters on the high seas a foreign ship, other than a ship entitled to complete immunity in accordance with articles 95 and 96, is not justified in boarding it unless there is reasonable ground for suspecting that:
(a) the ship is engaged in piracy;
(b) the ship is engaged in the slave trade;
(c) the ship is engaged in unauthorized broadcasting and the flag State of the warship has jurisdiction under article 109;
(d) the ship is without nationality; or
(e) though flying a foreign flag or refusing to show its flag, the ship is, in reality, of the same nationality as the warship.
2. In the cases provided for in paragraph 1, the warship may proceed to verify the ship's right to fly its flag. To this end, it may send a boat under the command of an officer to the suspected ship. If suspicion remains after the documents have been checked, it may proceed to a further examination on board the ship, which must be carried out with all possible consideration.
3. If the suspicions prove to be unfounded, and provided that the ship boarded has not committed any act justifying them, it shall be compensated for any loss or damage that may have been sustained.
4. These provisions apply *mutatis mutandis* to military aircraft.
5. These provisions also apply to any other duly authorized ships or aircraft clearly marked and identifiable as being on government service.

Article 51, Charter of the United Nations

Nothing in this present Charter shall impair the inherent right of individual and collective self-defense if an armed attack occurs against a Member of the United Nations until the Security Council has taken the measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.